

Claims

- [c1] 1. A magnetic shield assembly for confining rotor windings in a generator comprising a substantially cylindrical tubular shield of two or more part-annular segments adapted to enclose the rotor windings; a plurality of axially spaced rings located on said tubular shield; and a plurality of annular spacers radially between said tubular shield and said plurality of rings and axially between adjacent rings to thereby present physical barriers to axial migration of said plurality of rings.
- [c2] 2. The magnetic shield assembly of claim 1 wherein annular spacers are bonded to said magnetic shield but not to said rings.
- [c3] 3. The magnetic shield assembly of claim 1 wherein each of said annular spacers includes a pair of flat ends and a raised top surface connected to said pair of flat ends by a pair of angled ramps.
- [c4] 4. The magnetic shield assembly of claim 3 wherein said rings are formed with radially inner edges chamfered to substantially match said pair of ramps.

- [c5] 5. The magnetic shield assembly of claim 3 wherein said top surface is formed with a plurality of cooling slots.
- [c6] 6. The magnetic shield assembly of claim 3 wherein each ring is supported on flat ends of adjacent spacers.
- [c7] 7. The magnetic shield assembly of claim 1 including means for limiting axial movement of said spacers on said magnetic shield.
- [c8] 8. The magnetic shield assembly of claim 1 wherein said spacers are constructed of laminated fabric-based carbon epoxy.
- [c9] 9. The magnetic shield assembly of claim 3 wherein said spacers are constructed of laminated fabric-based carbon epoxy.
- [c10] 10. The magnetic shield assembly of claim 2 wherein said release agent comprises boron nitride.
- [c11] 11. A magnetic shield assembly for confining rotor windings in a generator comprising a substantially cylindrical tubular shield of two or more part-annular segments adapted to enclose the rotor windings; a plurality of axially spaced rings located on said tubular shield, said rings having a radially inner surface with at least one surface depression therein; and epoxy adhesive lo-

cated between said rings and said magnetic shield and bonded to said magnetic shield, with a release agent between said epoxy adhesive and said rings; and wherein said at least one surface depression is filled with cured epoxy adhesive, thus forming a mechanical barrier to axial migration of said rings on said magnetic shield.

- [c12] 12. The magnetic shield assembly of claim 11 wherein said at least one surface depression comprises an annular groove.
- [c13] 13. The magnetic shield assembly of claim 11 wherein said at least one surface depression comprises a plurality of circumferentially spaced concavities.
- [c14] 14. The magnetic shield assembly of claim 11 wherein said at least one surface depression has a depth of between about 0.03 and 0.05 inch.
- [c15] 15. The magnetic shield assembly of claim 11 wherein said tubular shield is formed with a plurality of axially spaced cooling apertures and wherein said rings are axially spaced between said apertures.
- [c16] 16. The magnetic shield assembly of claim 11 wherein said release agent comprises polytetrafluoroethylene.
- [c17] 17. The magnetic shield assembly of claim 11 wherein

said release agent comprises boron nitride.